

although they are not as distinct as the normal septa when viewed from the exterior; wall calcareous, imperforate and microgranular, with some additional material incorporated in the epidermal layer, interior simple, not labyrinthic, and with no transverse partitions; aperture at the peripheral angle, consisting of a single slit which extends a short distance down the apertural face.

Greatest diameter of holotype 0.65 mm, least diameter 0.49 mm, greatest thickness 0.16 mm. Other specimens range from 0.47 to 0.86 mm in greatest diameter.

Remarks.—In addition to the different generic characters enumerated above, this species may be distinguished from *Stomatostoecha plummerae*, n. sp. by its being slightly smaller, in being flattened rather than lenticular and biumbonate, and in having a more pronounced tendency to uncoil in the later stages. The chambers are less numerous, and are not as low and broad, but may even appear wedge-shaped, and the septa are much thinner and are straighter. *Phenacophragma assurgens* also differs from *Choffatella decipiens* Schlumberger in being about one third as large, in having less numerous chambers, and in lacking the labyrinthic interior and multiple aperture.

Types and occurrence.—Holotype (U.S.N.M. no. 106225), figured paratypes (U.S.N.M. nos. 106226a–g), and unfigured paratypes (U.S.N.M.

no. 106227) from the Glen Rose limestone, 520 feet below the top, in a road cut on the east side of U. S. Highway 281, 2.4 miles north of the junction with Texas State Highway 46, Comal County, Texas, collected by A. R. Loeblich, Jr.; figured sectioned paratype (U.S.N.M. no. 106229) from E. R. Applin collection from the same horizon and locality.

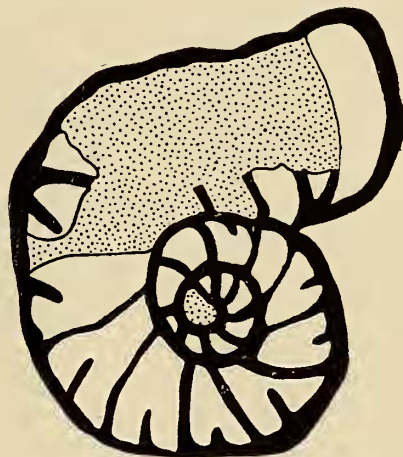


FIG. 6.—*Phenacophragma assurgens* Applin, Loeblich, and Tappan, n. gen., n. sp. Camera-lucida drawing of thin section of paratype (U.S.N.M. no. 106229), showing alternation of normal and intercalary septa and more delicate wall structure than in *Stomatostoecha plummerae*. $\times 95$.

ENTOMOLOGY.—*Additional illustrations and notes on Aedes bambusicolus Knight and Rozeboom.*¹ EDWARD S. ROSS, California Academy of Sciences. (Communicated by ALAN STONE.)

Aedes (Stegomyia) bambusicolus Knight and Rozeboom² was described from one of two male specimens reared from a bamboo stump on Culion Island, Philippine Islands, June 20, 1945. The female, larva, pupa, and biology have not yet been described. During June 1945, the writer collected a small series of this species near San José, Mindoro, and secured adult-associated larval and pupal skins. In view of the remarkable nature of the early stages of the species, it seems desirable to publish the present illustrations and notes at this time.

Male.—Discrepancies in the terminali figure published by Knight and Rozeboom

(pl. 10, fig. 8) and the one presented here (Fig. 1) will be noticed. These are apparently due to the fact that the former was drawn from a crushed slide preparation, which exhibits the various structures spread apart and the ordinarily dorsally directed inner setae of the basistyle in profile. The scales of the basistyle were also apparently intentionally omitted. My illustration is based on an uncrushed preparation and shows the various structures and inner setae in the true relation and perspective. These setae appear to be much shorter than they actually are because of the foreshortened representation. The disadvantage of each of these methods of mounting genitalia can be overcome by using the figures in a supplementary manner.

Not noted in the original description is a

¹ Received October 29, 1949.

² KNIGHT, K. L., and ROZEBOOM, L. E. *The Aedes (Stegomyia) albolineatus group (Diptera, Culicidae)*. Proc. Biol. Soc. Washington 59: 94, pls. 9, 10. 1946.

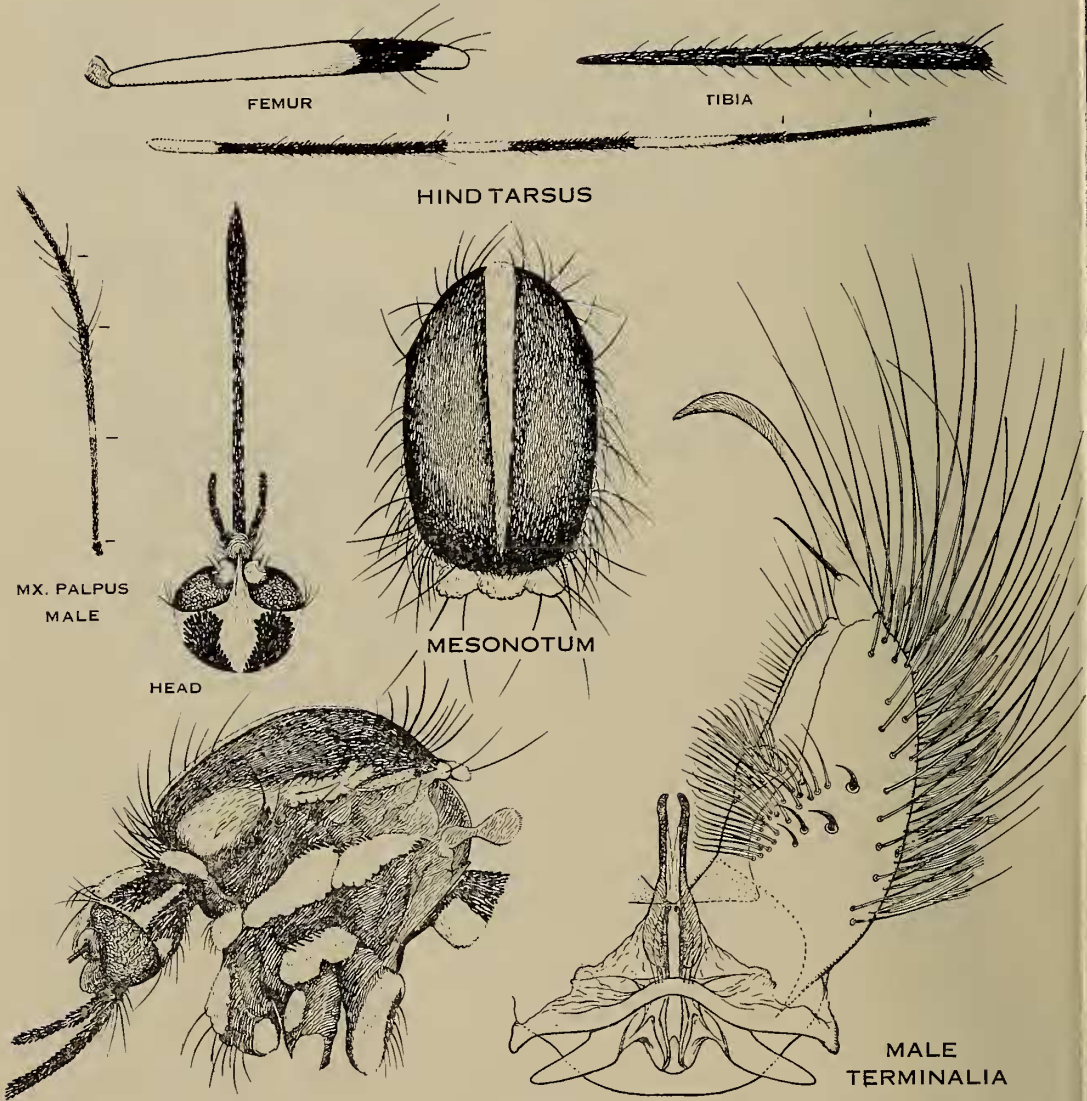


FIG. 1.—Adult characters of *Aedes bambusicolus* Knight and Rozeboom. (Unless otherwise stated, all drawings are based on a female.)

very narrow pale band at base of third palpal segment (see Fig. 1).

Female.—Certain salient features are illustrated in Fig. 1. The markings are almost identical to those of male.

Larva.—Very elongate, narrow; thorax scarcely wider than head. Colorless except for head and its appendages, which are pale straw-yellow; anal plate and air tube straw-yellow; sclerite at base of ventral brush, comb scales, and spiracular plates golden-yellow. Head form and dorsal chaetotaxy as figured (Fig. 2). Thoracic and

abdominal integument smooth; hairs generally fine, poorly branched, lateral hairs golden-yellow. Terminal abdominal structures as figured (Fig. 2); comb scales generally four in number occasionally only three present, apices often forked, plate variable in shape; pecten teeth vary from one to four but usually three in number; sclerite at base of ventral brush characteristic, invariably present.

Pupa.—Abdominal chaetotaxy as figured (Fig. 2). Color pale golden-yellow throughout. Differs from all other *Aedes* pupae

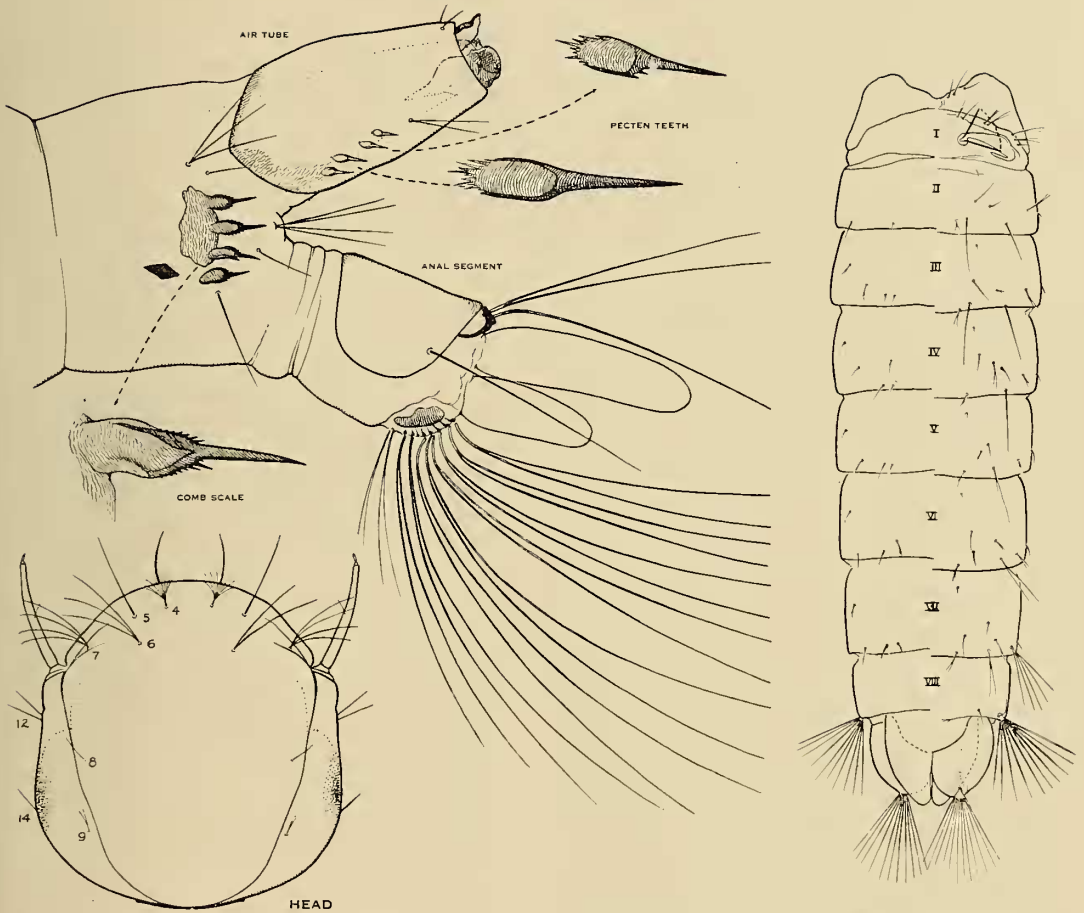


FIG. 2.—Larval characters and abdomen of pupa of *Aedes bambusicolus* Knight and Rozeboom. Left side of pupa ventral; right side, dorsal.

known to the writer in the great development of the paddle hair and enlarged genital sac of the male which is longer than the paddles. A preparation of a male pupa with the completely developed adult within shows that the terminal third of this elongation accommodates the long outer setae of the basistyle developing within. The genital sac of the female is, of course, much smaller than that of the male. The only parallel known to the writer to the greatly developed paddle hair has been figured by Edwards (fig. 162)³ for *Erctmapodites quinquevittatus* Theobald. Here also the genital capsule (sex not stated) is relatively large but neither this nor the paddles are as large in

relation to the abdomen as in *bambusicolus*.

Material examined.—Four males and three females were reared from two lots of larvae collected on June 10 and 14, 1945. Five adult-associated larval and pupal skins and six whole mounts of larvae were thus obtained. All are from a forest three miles southeast of San José, Mindoro. Specimens will be deposited in the U. S. National Museum and the California Academy of Sciences.

Biology.—Larvae occur in rather foul water in butts of freshly cut bamboo (1 to 2 inches in diameter) in the dark shade of primary forest. The activities, habitat, and general appearance of the larvae are reminiscent of those of certain species of *Armigeres*. They remain at the bottom of culture jars for prolonged periods vigorously probing the bottom muck in a manner quite

³ EDWARDS, F. W. *Mosquitoes of the Ethiopian Region, III: Culicine adults and pupae*: 499 pp., figs. British Museum (Natural History), London, 1941.

unlike most species of *Stegomyia*. No observations were made on the habits of the adult. The species may be regarded as quite rare as it was encountered only twice during nearly a year of intensive collecting in the

area. It is likely to be overlooked, however, as its larvae may be mistaken for those of certain species of *Armigeres* and its adults for certain other members of the *albolineatus* group.

ZOOLOGY.—Recent species of the lucinoid pelecypod *Fimbria*.¹ DAVID NICOL, U. S. National Museum.

The living species of *Fimbria* [*Corbis*] were reviewed by Lamy in 1921. Since that time no comprehensive study of the genus has been published, and only a few figures, lists, or brief descriptions of its species have been mentioned in Indo-Pacific faunal studies. The number of specimens of *Fimbria* at the U. S. National Museum has been greatly augmented by the shells collected at Bikini, and with this large amount of material it is possible to add to our knowledge of the genus.

Although the Fimbriidae are now a small family comprising only the genus *Fimbria* with two living species, during Jurassic and Cretaceous times it was well represented in number of species in warm and temperate seas all over the world. At the end of the Cretaceous and during all of the Tertiary, the geographic range of the family has slowly contracted until it is found now only in the warm waters of the eastern Indian Ocean and the western and central Pacific Ocean.

Family FIMBRIIDAE, new name

Genus *Fimbria* Megerle von Mühlfeld, 1811

Genotype: *Fimbria magna* Megerle von Mühlfeld, 1811 = *Venus fimbriata* Linné, 1758 (monotypy).
Venus Linné, 1758 (in part).
Lucina Bruguière, 1797 (in part).
Gafrarium Röding, 1798 (in part).
Corbis Cuvier, 1817. Genotype: *Venus fimbriata* Linné, 1758 (monotypy).
Idothea Schumacher, 1817 (not *Idothea* Fabricius, 1796). Genotype: *Idothea perforata* Schumacher, 1817 = *Venus fimbriata* Linné, 1758 (monotypy).

For the past hundred years the name *Corbis* has been used almost without exception. Most

workers consider *Fimbria* Megerle von Mühlfeld, 1811, a junior synonym. Bohadsch, 1761, had used the name *Fimbria* for an udibranch, but recently his work has been suppressed by a suspension of the rules (Opinion 185, 1944); thus *Fimbria* Megerle von Mühlfeld can be used. If the law of priority is followed, *Fimbria* Megerle von Mühlfeld, 1811, must replace *Corbis* Cuvier, 1817. One other solution is to ask for another suspension of the rules in order to continue the use of the name *Corbis*. Some taxonomists have thought that repeated suspensions of the rules would stabilize nomenclature. It is becoming more and more evident that this is not so, and, moreover, a suspension of the rules created the problem of *Fimbria* versus *Corbis*. Because the family is not a large or important one, the writer believes that the wiser course of action is to follow the law of priority, adopt the genus name *Fimbria*, and create the new family name Fimbriidae.

SHELL MORPHOLOGY OF LIVING SPECIES OF FIMBRIA

Shell.—Porcellanous, periostracum lacking.

Valves.—Equal, not gaping, subequilateral, transversely elliptical, ventricose.

Ornamentation.—Cancellate; concentric ribs more prominent; interior ventral, anterior, and posterior margins finely crenulated; most specimens exhibiting a shallow furrow which begins at the posterior end of the umbonal area and runs obliquely posteriorly and downward, passing in front of the posterior adductor muscle scar to the ventral margin; posterior edge of this furrow marked exteriorly by a change in the character of the ornamentation; small, slightly depressed, lanceolate lunule, varying in elongation, always present; narrow, depressed escutcheon occupied by ligament except for small part of posterior portion.

Beaks.—Prosogyrate, contiguous.

Ligament.—Parivincular, opisthodontic, external but sunken.

¹ Published by permission of the Secretary of the Smithsonian Institution. Received October 14, 1949.